

## EAST Search History

| Ref # | Hits | Search Query   | DBs   | Default Operator | Plurals | Time Stamp       |
|-------|------|--|---|------------------|---------|------------------|
| L1    | 1    | 702/35.ccls. and (decomposing\$4 and resolution and defect\$4 and valve)     | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/01/10 15:29 |
| L2    | 7    | "702"/\$.ccls. and (decomposing\$4 and resolution and defect\$4 and valve)   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/01/10 15:27 |
| L3    | 0    | 73/861.356.ccls. and (decomposing\$4 and resolution and defect\$4 and valve) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/01/10 15:29 |
| L6    | 0    | 73/1.72.ccls. and (decomposing\$4 and resolution and defect\$4 and valve)    | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/01/10 15:29 |
| L7    | 0    | 702/47.ccls. and (decomposing\$4 and resolution and defect\$4 and valve)     | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/01/10 15:29 |
| L8    | 0    | 702/100.ccls. and (decomposing\$4 and resolution and defect\$4 and valve)    | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/01/10 15:30 |
| L9    | 1    | 703/5.ccls. and (decomposing\$4 and resolution and defect\$4 and valve)      | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/01/10 15:30 |
| L10   | 0    | 703/9.ccls. and (decomposing\$4 and resolution and defect\$4 and valve)      | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/01/10 15:30 |
| L11   | 0    | 700/282.ccls. and (decomposing\$4 and resolution and defect\$4 and valve)    | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/01/10 15:30 |

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|     |       |  |   |    |    |                  |
|-----|-------|--|---|----|----|------------------|
| L12 | 231   | (decomposing\$4 and resolution and defect\$4 and valve)                | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/01/10 15:31 |
| L13 | 0     | (decomposing\$4 and groupng\$4 and resolution and defect\$4 and valve) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/01/10 15:31 |
| S1  | 176   | valve and (flow adj rate) and wavelet                                  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/10/07 10:44 |
| S2  | 0     | (valve near defect) and (flow adj rate) and wavelet                    | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2004/10/29 11:40 |
| S3  | 6     | (valve near defect) and wavelet  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2004/10/29 11:40 |
| S4  | 32    | 73/861.356.ccls. and valve   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2004/10/29 11:50 |
| S5  | 343   | valve near defect  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2004/10/29 11:51 |
| S6  | 42    | (valve near defect) and (flow adj rate)                                | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2004/10/29 11:53 |
| S7  | 60001 | valve and regulator and flow   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2004/10/29 11:53 |
| S8  | 51    | (valve and regulator and flow) and wavelet                             | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2004/10/29 13:12 |

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|-----|-----|--|---|----|----|------------------|
| S9  | 0   | valve and (wavelet near packet near transformation)    | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2004/10/29 13:13 |
| S10 | 529 | valve and wavelet                                      | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2004/10/29 13:13 |
| S11 | 163 | (valve and wavelet) and resolution                     | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2004/10/29 13:25 |
| S12 | 100 | (valve and wavelet) and decomposition                  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2004/10/29 14:18 |
| S13 | 53  | (flow near control) and valve and wavelet              | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2004/10/29 14:19 |
| S14 | 2   | ((flow near control) and valve and wavelet) and defect | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2004/10/29 14:19 |
| S15 | 8   | singularity and wavelet and valve                      | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2004/11/02 13:15 |
| S16 | 531 | wavelet and valve                                      | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2004/11/02 13:15 |
| S17 | 176 | (wavelet and valve) and (flow adj rate)                | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2004/11/03 08:23 |
| S18 | 6   | valve and wavelet and singularity and threshold        | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2004/11/03 11:32 |

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|     |     |  |   |    |    |                  |
|-----|-----|--|---|----|----|------------------|
| S19 | 25  | pump and wavelet and singularity and threshold | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2004/11/03 11:32 |
| S20 | 72  | 73/1.72.ccls. and valve                        | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2004/11/04 09:14 |
| S21 | 6   | 703/5.ccls. and valve                          | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2004/11/04 09:15 |
| S22 | 29  | 703/9.ccls. and valve                          | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2004/11/04 09:16 |
| S23 | 77  | 702/47.ccls. and valve                         | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2004/11/04 09:21 |
| S24 | 111 | 702/100.ccls. and valve                        | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2004/11/04 09:23 |
| S25 | 395 | 700/282.ccls. and valve                        | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2004/11/04 09:23 |
| S26 | 38  | 702/35.ccls. and valve                         | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2004/11/04 11:15 |
| S27 | 51  | 702/35.ccls. and valve                         | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/01/17 17:28 |
| S28 | 87  | 702/47.ccls. and valve                         | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/10/07 10:44 |

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|-----|-----|--|---|----|----|------------------|
| S29 | 126 | 702/100.ccls. and valve  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/10/07 10:45 |
| S30 | 440 | 700/282.ccls. and valve  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/10/07 10:45 |
| S31 | 6   | 703/5.ccls. and valve  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/10/07 10:45 |
| S32 | 38  | 703/9.ccls. and valve  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/10/07 10:45 |
| S33 | 32  | 73/861.356.ccls. and valve   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/10/07 10:45 |
| S34 | 78  | 73/1.72.ccls. and valve  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/10/07 10:45 |
| S35 | 1   | 702/35.ccls. and (decomposing\$4<br>and resolution and defect\$4 and<br>valve)   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/07/16 12:41 |
| S36 | 0   | 702/47.ccls. and (decomposing\$4<br>and resolution and defect\$4 and<br>valve)   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/01/18 09:27 |
| S37 | 0   | 702/100.ccls. and (decomposing\$4<br>and resolution and defect\$4 and<br>valve)  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/01/18 09:27 |
| S38 | 7   | "702"/\$.ccls. and (decomposing\$4<br>and resolution and defect\$4 and<br>valve) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/01/18 09:38 |

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|-----|-----|--|---|----|----|------------------|
| S39 | 0   | 73/1.72.ccls. and (decomposing\$4 and resolution and defect\$4 and valve)    | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/01/18 09:38 |
| S40 | 0   | 73/861.356.ccls. and (decomposing\$4 and resolution and defect\$4 and valve) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/01/18 09:39 |
| S41 | 2   | "73"/\$.ccls. and (decomposing\$4 and resolution and defect\$4 and valve)    | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/01/18 09:39 |
| S42 | 1   | 703/5.ccls. and (decomposing\$4 and resolution and defect\$4 and valve)      | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/01/18 09:39 |
| S43 | 0   | 703/9.ccls. and (decomposing\$4 and resolution and defect\$4 and valve)      | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/01/18 09:39 |
| S44 | 4   | "703"/\$.ccls. and (decomposing\$4 and resolution and defect\$4 and valve)   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/01/18 09:40 |
| S45 | 0   | 700/282.ccls. and (decomposing\$4 and resolution and defect\$4 and valve)    | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/01/18 09:40 |
| S46 | 10  | "700"/\$.ccls. and (decomposing\$4 and resolution and defect\$4 and valve)   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/01/18 09:40 |
| S47 | 187 | (decomposing\$4 and resolution and defect\$4 and valve)                      | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/01/18 09:57 |
| S48 | 1   | (decomposing\$4 and resolution and defect\$4 and valve).CLM.                 | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/01/18 09:57 |

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|-----|---|--|---|----|----|------------------|
| S49 | 1 | 702/35.ccls. and (decomposing\$4 and resolution and defect\$4 and valve)     | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/01/10 15:24 |
| S50 | 0 | 702/100.ccls. and (decomposing\$4 and resolution and defect\$4 and valve)    | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/07/16 12:42 |
| S51 | 0 | 702/47.ccls. and (decomposing\$4 and resolution and defect\$4 and valve)     | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/07/16 12:42 |
| S52 | 7 | "702"/\$.ccls. and (decomposing\$4 and resolution and defect\$4 and valve)   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/07/16 12:42 |
| S53 | 0 | 73/861.ccls. and (decomposing\$4 and resolution and defect\$4 and valve)     | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/07/16 12:44 |
| S54 | 0 | 73/861.356.ccls. and (decomposing\$4 and resolution and defect\$4 and valve) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/07/16 12:44 |
| S55 | 0 | 73/1.72.ccls. and (decomposing\$4 and resolution and defect\$4 and valve)    | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/07/16 12:44 |
| S56 | 3 | "73"/\$.ccls. and (decomposing\$4 and resolution and defect\$4 and valve)    | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/07/16 12:44 |
| S57 | 1 | 703/5.ccls. and (decomposing\$4 and resolution and defect\$4 and valve)      | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/07/16 12:45 |
| S58 | 0 | 703/9.ccls. and (decomposing\$4 and resolution and defect\$4 and valve)      | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/07/16 12:45 |

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|-----|----|--|---|----|----|------------------|
| S59 | 4  | "703"/\$.ccls. and (decomposing\$4 and resolution and defect\$4 and valve) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/07/16 12:45 |
| S60 | 0  | 700/282.ccls. and (decomposing\$4 and resolution and defect\$4 and valve)  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/07/16 12:45 |
| S61 | 12 | "700"/\$.ccls. and (decomposing\$4 and resolution and defect\$4 and valve) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/07/16 12:45 |